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(54) **ELECTROMAGNETIC INDUCTION THIN FILM PROBE**

(57) Abstract:

PROBLEM TO BE SOLVED: To enable use of a probe at a smaller clearance and measurement of discontinued parts with a complicated shape while achieving a higher detection sensitivity by forming a concentric circular coil on a thin film made of a resin or the like while an electromagnetic shielding layer is arranged on one surface side of the coil.

SOLUTION: In the forming of a probe 10, a concentric circular coil 11 is stuck on one surface of a thin film 12 made of a resin or other synthetic resins and an amorphous metal 13 as electromagnetic shielding layer on the side opposite to the coil 11. The shape of the coil 11 may be circular, oval or rectangular as the stuck surface of the thin film 12 is viewed from above. When inspecting a discontinued part or the like of a testing object, a high frequency voltage is applied to the coil 11 from an eddy current flaw detector to perform a scanning in the longitudinal direction of the probe and in the vertical direction thereto in the state where the coil 11 is in contact with the testing object or slightly separated therefrom and a change in the impedance of the coil 11 is sent to the eddy current flaw detector as signal. Then, the signal is analyzed to detect a flaw.